

Plant Your Advertisement in Rich Soil.

THE PROGRESSIVE FARMER.

Largest Circulation of any Paper in the South Atlantic States.

THE INDUSTRIAL AND EDUCATIONAL INTERESTS OF OUR PEOPLE PARAMOUNT TO ALL OTHER CONSIDERATIONS OF STATE POLICY.

Vol. 11.

RALEIGH, N. C., MAY 12, 1896.

No. 14

THE NATIONAL FARMERS' ALLIANCE AND INDUSTRIAL UNION.

President—Mann Page, Brandon, Va.
Vice-President—H. C. Snavely, Lebanon, Pa.
Secretary-Treasurer—R. A. Southworth, Denver, Col.

EXECUTIVE BOARD.
H. L. Loucks, Huron, S. D.; W. P. Bricker, Cogan Station, Pa.; J. F. Willett, Kansas; W. L. Peeke, Ga.

JUDICIARY.
H. A. Southworth, Denver, Colo.
H. W. Beck, Alabama.
M. D. Davis, Kentucky.

SOUTH CAROLINA FARMERS' STATE ALLIANCE.

President—Dr. Cyrus Thompson, Richlands, N. C.
Vice-President—Jno. Graham, Ridge way, N. C.
Secretary-Treasurer—W. S. Barnes, Hillsboro, N. C.
Lecturer—J. T. E. Hoover, Elm City, N. C.

Steward—Dr. V. N. Scowell, Villa now, N. C.
Chaplain—Rev. P. H. Massey, Durham, N. C.

Door-keeper—Geo. T. Lane, Greensboro, N. C.
Assistant Door-keeper—Jas. E. Lyon, Durham, N. C.

Permanent Agents—A. D. K. Wallace, Rutherfordton, N. C.
Farm Business Agent—E. Ivey, Hillsboro, N. C.

Trustee Business Agency Fund—W. A. Graham, Macpherson, N. C.

EXECUTIVE COMMITTEE OF THE NORTH CAROLINA FARMERS' STATE ALLIANCE.

A. F. Hileman, Concord, N. C.; N. C. Egan, Trinity, N. C.; James M. Mowbray, Kinston, N. C.

STATE ALLIANCE JUDICIARY COMMITTEE.

John Brady, Gatesville, N. C.; Dr. J. F. Harrell, Whiteville, N. C.; T. J. Candler, Aetion, N. C.

North Carolina Reform Press Association.

Officers—J. L. Ramsey, President; Marion Butler, Vice-President; W. S. Barnes, Secretary.

PAPEES.

Progressive Farmer, State Organ, Raleigh, N. C.
Caucasian, Raleigh, N. C.
Agric., Raleigh, N. C.
Battler, Raleigh, N. C.
Our Home, Raleigh, N. C.
The Populist, Raleigh, N. C.
The People's Paper, Charlotte, N. C.
The Vestibule, Concord, N. C.
The Plow-boy, Wadesboro, N. C.
Carolina Watchman, Hillsboro, N. C.

Each of the above-named papers are requested to keep the list standing on the first page and add others, provided they are duly elected. Any paper failing to do so will be dropped from the list promptly. Our people can now see what papers are published in their interest.

AGRICULTURE.

The cardinal essentials of spraying are to begin early, act promptly, apply thoroughly mixtures carefully prepared. "Make hay while the sun shines," is good. But you can't make any hay unless you have land that will bring grass or clover to make it, and this will require some efforts on your part.

In China ten acres is a monster farm. Large holdings are sometimes handed down through many generations intact, so that several hundred people hold it in common, so great is their reverence for their ancestry.

As the twig is bent, the tree inclines. If there are twigs around the garden that keep the rays of the sun away from it they had better be bent off entirely so as to cast no shade. Shade trees have no business around the garden.

For best results in garden cultivation, it will be well to have the ground dry and free from trash when it is plowed. Coarse manure will be an abomination to the one who has to cultivate the garden. Nothing but well rotted manure should be used.

There is such a thing as so running a farm that it and its outfit depreciate in value with each succeeding year that a crop is taken from it. No method will pay in the long run unless so conducted that there is a constant addition to the value and productiveness of the land.

Sell when ready. It never behoves us to work ourselves up to a point where we think an animal will bring more money by keeping it awhile. The feed, time and care given to other stock will make up the difference. At a later date we are apt to take a less price than we were formerly offered.

One-sixth of an acre of good land near the house, if well taken care of and properly planted with the most prolific varieties of strawberries, raspberries, blackberries, gooseberries, currants and grapes, would afford a plentiful supply for a family of six or eight the whole year. Fifty apple trees, six crab, six cherry and six plum trees would complete the fruit plantation.

BUILDING A SILO.

Mr. R. W. Blanchard, Woodland, N. C., asks us to give him some information about building silos. Prof. F. E. Emery, of the N. C. Experiment Station, recently had an article on this subject in the Biblical Recorder. As Prof. Emery is well acquainted with the subject, we give it in full. He says: "We have been asked to give directions for building a silo for use on small farms. There are several ways that are simple, durable and cheap. One following the originals very closely is simply a hole in the ground. The word silo comes from the Egyptian sira, and it is said in Egypt that wheat used to be stored in a jug-shaped cavity in the earth, the top of which was sealed up when filled with grain in order to save the grain from weavils. The Germans used to preserve sugar beet tops by scooping out a place on which to pile the tops, and then cover with a few inches (six or eight) of earth.

There are some silos in North Carolina which have been made by an excavation (round or square) in the earth and which is boarded a half above the surface and roofed over. The silage can be put in contact with the earth sides. A notable instance may be seen at Cloverdale Stock and Dairy Farm, near Raleigh, where, for a number of years, this form of silo has been in regular use. There is only one serious objection to these excavated silos: the hard labor of lifting out the silage is too slow and costs too much.

The modern silo is built above the ground and should be round or square with the corners cut off, making it to ward the shape of an octagon, but really taking off much less of the corners. This does very well, but the circle preserves the contents better. A circular silo may be built according to the plans detailed by cuts and minute directions in the North Carolina Experiment Station Bulletin 89. These silos are built of 2x4 inch studding set on a circular foundation and boarded up round and round with half-inch fencing. At A & M. College and Ocochee Farm there may be seen silos built of staves exactly like a straight sided tank with an earthen or cement bottom.

To build a silo first select a site which will be easy to reach with the wagons and from which the farm stock can be easily fed. Make a frost proof foundation and raise it just enough above the level of the earth so the drip from the roof will not spatter the wood work. To get the circle and level it when doing the mason work, set up a stake in the plat where the middle of the silo is to be, and at the height the wall is desired. With a garden line and stick scribe a circle on the ground, using a length of the line for a radius equal to half the diameter desired for the silo, add to this the thickness of the foundation wall, and scribe a second circle. Outside of the outer circle and five or six feet from it set six or more stakes and saw off or drive down level with that at the center. Nail straight edge boards from stake to stake on the outside and level with the tops of the stakes. A mason's level-board or a stretched line with one end on the center post and the other end on the circle of boards level with the foundation.

"Cut 2x8 or 2x10 inch plank two inches thick into about two foot lengths, but cut so they will join together well on the top of the wall and nail down to the cemented foundation with twenty penny nails. Cut a second lot of the same plank and fit over the first to break joints with them. Now set up the 2x4 studding at the outer edge of the sill just put on. Then brace and begin boarding up by cutting the first board from full width at one end to a half inch at the other and begin at the narrow end and nail to a stud; spring to the next and nail, and so continue round and round until the proper height is reached. Do the same on the inside, then put paper round the inside, and put on the second inside course of boards. All the boards should have been dressed to even thickness. The outside may have been covered with German siding. Put on plate as for silo, and put on roof. A door must be left at the bottom, and other doors above and aside from the first from which to feed the silage. A door in some convenient part of the roof above the plate serves for use in filling the silo. All the doors may be double the width of the space between two studs, and for the height of each the stud in the middle may be cut out. The doors should be made of the same material and just as thick as the inside boarding, so when shut there shall be no projec-

tion into the silo, but all shall be plain and smooth.

Lay about floor and plaster over with cement which plaster should be spread up over the foundation wall to the wood work to make air tight every possible crevice and leave a tight, smooth interior.

Leave a narrow space under the plate on the outside for air to pass out, and open a space at the bottom by loosening the lower strip around. Air passing up between the walls will tend to lengthen the life of the silo.

The tank silo is set on the inner edge of the foundation, so the plastered wall forms a straight line down with the staves. Then cement is banked up on the outside at the foot of the staves to make the whole air tight.

The doors of the stave silo may extend from hoop to hoop and consist of four or five staves sawed the right lengths and cleated together. The hoops are broad and long iron bands which are drawn up tight by bolts through heads on each end.

A circular silo 10 feet in diameter and 22 feet deep will hold enough silage at 80 pounds per cubic foot, and feeding 40 pounds per cow per day, to last six cows six months and allow 20 per cent for shrinkage and loss.

This allowance of 20 per cent is about the average loss in curing by drying or ensiling. If the silo keeps perfectly well, there should be some silage to spare, rather than to fall short when the silo of the above dimensions is well filled.

Grooming is but secondary to diet. Health is procured by keeping the pores of the skin open, and this can only be done by the use of the curry comb and the brush, for these remove the dead epidermis thrown off on the form of pellicles. In addition, do not be afraid to use soap and water occasionally.

These experiments were taken from the station because of greater accuracy, and hence more reliability. These experiments show that potash alone is the most profitable. These experiments agree with some I have known tried by farmers. But these experiments are not a safe universal guide.

PROFIT AND LOSS IN FERTILIZING.

Let us look more carefully into the practical working of fertilizing. Scientists get hold of a great number of facts and then carefully study and correlate in order to establish any law in nature. He would be a very useful, not to say wise, man, who would collect enough facts to give us a few laws that would guide us unerringly in fertilizing our farms.

Suppose one could buy and apply, say \$100 worth of fertilizer and reap a harvest \$150 more than he would have done had he used no fertilizer! This would be 50 per cent. on his investment.

This has been done. If laws could be established by which 30 per cent. could usually be realized by fertilizing, farming would be far more profitable than it now is. I believe this to be possible; at least, until our farming lands had been brought to a high degree of fertility.

The trouble is, one has bought \$100 worth of fertilizer and reaped only \$50 more than he would have done had he bought no fertilizer. He has lost 50 per cent.

No paper could give space for all the facts, but after reading, study, observation and experiments extending through several years, I venture to write:

Law No. 1. One must know what his land lacks in plant food to profitably fertilize.

Law No. 2. One must know what a plant feeds upon before he can profitably supply the proper nourishment.

If these are not laws, will a wiser man show their error and give us at least two better ones?

These two things being known; then, when and how, and how much fertilizer to apply to different plants, on different soils and under different circumstances is a field for unlimited study, thought and experiment. No one need hope to reach perfection in this field. What most of us don't know here would make a large book.

But some novice who does not know what his land lacks, nor what his plants feed upon, cuts the Gordian knot by buying all three of the essential ingredients and with them enriching his lands so they will grow any crop.

Well, he learned much when he learned that of the many things plants feed upon only three were essential in a fertilizer, and what these three essentials were! But he has neither cut nor untied the knot. For, as a fact, this manner of fertilizing has already been shown to be unprofitable on most soils. This is because most soils do not lack all the essential ingredients, and the money paid for those we already have

an abundance overbalances the profit derived from the one or two we lacked.

I take four different experiments which were run through three years at our Agricultural Station at Lexington, Ky. One of these years was a wet season and the other two dry. Notice the different combinations of the three ingredients, as well as the results.

Where all three of the essential ingredients were used, there was an increase of yield and a financial profit of 24 per cent.

On the plots where nitrogen and phosphoric acid in combination were used two experiments showed small increase in yield of crop and two small decrease. Financial loss of 91 per cent., nearly the whole cost of fertilizers.

On plots where nitrogen and potash were used, all four of the experiments each year showed large increase in crop. Financial profit of 93 per cent. Here, as in the first case, the profit was cut down by the high cost of the nitrogen.

On the plots where phosphoric acid and potash were used, there was some increase in crop. Financial profit of less than 1 per cent.

On plots where nitrogen alone was used two experiments showed small increase in crop, one showed the same yield, and one small decrease in crop. Financial loss of 81 per cent.

On plots where phosphoric acid alone was used, one experiment showed small increase in crop, three small decreases. Financial loss of 100 per cent.

Where potash alone was used all four of the experiments showed very large increase in crop, and a financial profit of 179 per cent.

These experiments were taken from the station because of greater accuracy, and hence more reliability. These experiments show that potash alone is the most profitable. These experiments agree with some I have known tried by farmers. But these experiments are not a safe universal guide.

They were made on the lower silurian (Trenton limestone) formation. Experiments made on the subcarboniferous formation showed very different results. They indicated that phosphoric acid was the ingredient most needed on that formation.

Again these experiments were made with corn. They would not give same results for other crops.

Nevertheless, many of the experimental stations are insisting upon the benefits of potash on worn lands. Cropping has exhausted the potash. Lastly, he who farms on the Trenton limestone formation will not be apt to regret giving his worn land a coat of about 200 pounds of muriate of potash to the acre, every three or four years.—J. W. Harris, in Home and Farm.

No farmer can afford not to have good walks about his premises from the house to the barn and to other out buildings. The cost will be but a trifle when compared with a ruffled temper in a muddy time. Life on the farm is much as the farmer makes it. If he wants to trot around in the mud, he will have no walks. Look about you, and see how many have them and how many need them.

WEEKLY WEATHER CROP BULLETIN.

For the Week Ending Saturday, May 2, 1896.

CENTRAL OFFICE, Raleigh, N. C. The reports of correspondents of the Weekly Weather Crop Bulletin, issued by the North Carolina State Weather Service, for the week ending Saturday, May 2, 1896, indicate very favorable conditions, both for work and growth of crops. Cool nights the first few days of the week brought the mean temperature slightly below the normal, but the last five days were warm, bringing the average for the week about four degrees per day above the normal. Fine seasons occurred nearly every where on May 1st and 2nd, the largest amounts exceeding an inch along the central portion of the State. The general prospects are now very favorable indeed, and farmers are working spirits.

EASTERN DISTRICT.—Reports are nearly all quite favorable for this district; very few places did not share in the beneficial showers of May 1st and 2d, and the conditions have been fine, both for farm work and for growing crops. Cotton planting continues, but approaching completion; much has come up with promising stand and looks vigorous; some being chopped. Corn about planted, except on bottom land; stand fair, with fine green color and growing rapidly; but little was prevented from coming up by previous drought; some little damage by cut-

worms reported. Setting out tobacco plants progressing, and planting peanuts will be general during the next two weeks. Gardens, wheat and oats have improved; Irish potatoes look fresh and promising; sweet potatoes have sprouted nicely and a few have been set out. Large shipments of berries and peas to the North.

CENTRAL DISTRICT.—Quite heavy rains occurred in a few central counties, washing lands to some extent; in others the weather continues too dry. Planting late corn is going on vigorously; corn is quite large for the season. Cotton has not come up quite as well as hoped for, but the good seasons at the end of the week will improve the stand. Wheat looks well but is heading low; spring oats have improved. Rye has rusted some. Sweet potatoes have sprouted well. Transplanting tobacco commenced to be pushed in a few counties the last of the week, which indicates advanced growth of plants. Many reports still received of damage by potato bugs, but not cut worms in corn, and insects on tobacco, but the rainy weather will diminish these pests.

WESTERN DISTRICT.—Showers, which occurred throughout the district on the last three days of the week were just what was needed and seem to have prevented any serious damage which had been threatened by drought. There seems to have been really very little damage by dry weather, but every thing was greatly benefited by rains. Cotton is up with good stand in some places, but many farmers have not yet finished planting cotton. Corn planting is generally about finished, except late corn, and where up is looking well. Those who have not finished planting are rapidly getting the seed in the ground. All small grain is reported in good condition as a rule. Tobacco plants are plentiful, but setting out has not begun yet. Farmers well advanced with work.

LIVE STOCK.

VERY PROFITABLE COMBINATION.

There is great profit in a wise combination of the swine and cows. There is much waste of milk which cannot be used on the farm in any other way. The milk adds variety to the food of the hogs and tends to afford a balanced ration. No food is more palatable to the pigs than milk. A vigorous digestion is promoted and a disposition to take on flesh is extended. For shoats the sour milk is especially appropriate. In the estimation of some practical feeders, whose conclusions are to be respected, the acid in the sour milk is good for the older pigs—those more than four months old—is particularly valuable and equivalent to using cooked food in many instances.—Western Rural.

AN INTELLIGENT HORSE.

The horse which Dr. Goodell, of Salem, Mass., drives is a very intelligent animal, and a few days ago saved his owner a new sum for repairs, says the News of that city. The horse was standing in front of a Farraster street house, the doctor making a call, when a runaway came dashing down the street on the side where the doctor's team was standing. A collision was imminent, and spectators expected to see a grand smash up, but the doctor's horse fooled them. He, too, foresaw the danger and sprang up on the sidewalk, dragging the buggy after him. As soon as the runaway had passed, the intelligent animal backed out into the street again and stood there as complacently as if he had done nothing to be proud of.

FEEDING OATS TO FARM STOCK.

Oats has been long recognized as one of the very best grains for most classes of farm animals. This is especially true of horses and young stock of all kinds, unless it be pigs. The weight of evidence of many careful feeding experiments is against the profitability of feeding oats to young pigs except as a small part of their ration. One year with another oats are relatively higher in price than is corn in most parts of the United States. It is not alone a comparison of the price per bushel, but of the relative weight of a bushel of oats and one of corn that must be made. This year, however, with the largest crop of oats ever grown in this country, the price is exceptionally low, lower than for many years. There is no reason why farmers should not feed oats freely at present prices, except in localities in which the crop was a failure or very poor. How then to feed is a question about which there is much difference of opinion. For horses and colts, calves, sheep and lambs the writer would feed grain unground. For cows, steers and hogs it is an advantage to grind it. Good oat straw is a valuable food, and if the feeding is carefully done there is much to commend the plan of feeding sheaf oats. If large quantities are fed at once much of the straw will be left uneaten. Where there are convenient facilities for cutting the sheaf oats, a large percentage of straw can be utilized by so doing. The greater danger of injury by rats and mice if the oats are left unthreshed is about the only reason which can be urged in favor of threshing the crop in many cases. There are horses which do not properly masticate oats, but these are rather exceptional cases. If the grain is mixed with cut straw, hay or stover, it will be better eaten. Young animals pretty thoroughly masticate their food and the writer has not found sufficient gain from grinding to repay the cost of the work. This does not apply to pigs, however. It is better to have oats ground if to be fed to hogs of any age. In many cases a mixture of oats and corn will be better than either grain fed alone. The younger the stock the larger may be the proportion of oats. Many insist that oats alone are much better than any mixture of corn as food for colts. The writer has a higher appreciation of the value of corn, reasonably used, as a food for even young animals, than have many feeders, but he uses oats freely in present conditions. It would be a consummation much to be rejoiced over if the present low prices for oats would lead to the much larger use of this grain as food for the human animal. Its use for this purpose has greatly increased within the last quarter of a century, but it may wisely become more general.

UNITED STATES DEPARTMENT OF AGRICULTURE.

OFFICE OF THE SECRETARY, Washington, D. C., May 3 1896. Correspondence of the Progressive Farmer.

This Department having learned that requests have been made upon commercial seedmen for seed put up in papers similar to those used by the government and printed in simulation thereof, it appears proper to notify all seedmen, so far as may be possible, that the Department of Agriculture cannot permit the government seed contractors or any seedmen to sell seed in packets bearing the name of the Department of Agriculture or any words which might cause the receiver of the package to believe that it was a part of the government seed distribution.

This Department is taking great pains to have all the seed supplied it for this distribution carefully tested, and it is obviously improper for anyone to represent as government seed any seed not thus inspected, tested, and paid for by this Department.

No seed can be distributed free of postage through the mails except that delivered upon the order of members of Congress by the Department of Agriculture or sent out direct from this Department. The act of March 3, 1875, confines the franking of seeds by members of Congress to those seeds which they receive for distribution from the Department of Agriculture.

CHAS. W. DABNEY, JR., Acting Secretary.

Clover and corn form a simple cattle food combination that is hard to beat for producing milk or butter of good flavor and color. Good clover hay and corn meal will produce excellent milk, and so will clover hay and corn ensilage. There are some farmers who believe that first class clover hay and sweet ensilage, with plenty of corn in it, make a perfect butter ration, and that one will not receive enough more milk or butter by adding other grain, to pay for the extra cost.

Haverly—What was all that disturbance at Old Marital's golden wedding? Austin—It was caused by a Colorado man who had come under the impression that it was a silver one.

Let every old subscriber send us one new subscriber this week.